SAFETY HANDLE FOR PILINGS

FIELD OF THE INVENTION

This invention relates generally to the field of boating and in particular to a safety handle for use by individuals during the entry and exiting of a boat.

BACKGROUND OF THE INVENTION

A majority of preventable boating injuries occur when an individual attempts to either enter or exit a boat. Due to tides, style of boats, operator positioning, and so forth, the entry and exiting of a boat is known to be a major source of injury. An individual who steps from a fixed dock is often surprised by boat movement. Boat movement may be caused from something a complicated a wave that bounces from a seawall, or as simple as the weight of an individual that is entering or exiting the boat. Unfortunately, any movement of a boat can result in injury should the individual be unprepared. Typically an individual employs the gunwale of a boat as the first step for entry and exit. The gunwale is the upper edge of a boat's side whose width is dependant upon the boat size. In any event, the gunwale surface is located above the boat deck and must be traversed during entry and exit. Knowledgeable boaters understand the liability they face should one of their passengers be injured on the boat so every attempt is made to stabilize the boat while passengers unfamiliar to the boat are

boarding. Even if a passenger is very familiar with a boat, such as the boat owner or family member of the owner, carelessness can quickly ruin an otherwise most pleasurable boating experience.

Boating courses, such as that offered by the United States Power Squadrons, are used to teach the operator of a boat the proper docking techniques. In particular, the operator of a vessel is taught to position the entry location for the boat as close as possible to a piling wherein an individual can use the piling to grasp while boarding. Proper positioning of the boat to a piling will also will provide the passenger with a visual reference of a fixed object during the entry/exit procedure. Unfortunately, wood pilings are often a source of injury in and of themselves.

Wood pilings are designed for solely for support of a dock and will remain in place for as many years as possible. Eventually the weather causes the wood to fall into such disrepair that the piling must be replaced. Pilings are subjected to sun, rain, freezing, wood worms, barnacles, and other wood like destroying items. So as to obtain as long a life as possible, pilings are typically pressure treated.

Pressure-treated pilings are those pilings which have been commercially treated with a chemical wood preservative under pressure to assure penetration of the chemical into the wood. Chemical preservatives used by the industry to pressure treat wood vary in effectiveness and also in animal, human and environmental

toxicity. Some preservatives are classified as "restricted-use pesticides" which only certified persons may purchase and/or use. The treated wood is not a restricted-use product, but precautions for handling and disposal are necessary.

Water repellent products, with or without a fungicide, may also be used to coat a piling since these products are not restricted by the Environmental Protection Agency (EPA). These chemicals may be brushed, dipped or sprayed on wood to protect the surface but are short-lived. In Florida, a warm moist climate and wet soils provide very favorable conditions for biological organisms to decompose wood. When left untreated, wood exposed to moisture (rain, condensation, high humidity, soil moisture, and sea water) in a warm environment is readily attacked and rapidly degraded by naturally occurring organisms. These organisms (fungi, bacteria, termites, carpenter ants and several beetles and borers) are ubiquitous and abundant in our soils and waterways.

When the piling is new, this oil based product can leave an oily residual on those who touch the piling, or should an individual pick-up a wood sliver, the wood treatment may lead to infection. Once the outer coating begins to dry out, typically after years of weather exposure, the dryness of the wood lends itself to more wood slivers wherein most people will only touch a piling if they absolutely must. This is typically when they are falling with the resulting hand injuries from the wood to be

expected.

Attempts to address this problem have included the securement of handles to pilings but due to nearly infinite variety of boat placements due to the numerous boat designs, tidal changes and operator placement, fixed handles may provide assistance to only a few boaters. In addition, most marinas forbid anyone from attaching handles, satellite dishes, or any other item to a piling by use of nails and screws. Removal of items screwed into the wood results in exposure f the inner wood to the elements which results in a quicker drying of the wood, and of course a higher probably of an individual obtaining wood slivers.

Thus, what is needed in the art is a portable handgrip that prevents an individual from touching the wood of a piling while being strategically positioned to ensure that an individual will support themselves during the entry and exiting of a boat.

SUMMARY OF THE INVENTION

The present invention satisfies this need through provision of a handgrip that temporarily attaches to a wood piling. The handgrip is preferably constructed of a flexible plastic base member having a front surface with a series of wood engaging members. The base member is secured to a wood piling by a pair of straps secured to the base member and extend around the piling for positioning the base member in a fixed position. The wood engaging members help prevent the base member from sliding down the piling. On the back surface of the base member is a hand grip for use by the passengers for entry and exit to the boat. The handgrip may be formed integral to the base member or coupled thereto. The handgrip may also include a reflective material that allows the handgrip to glow at night or employ a chemical nightstick for night lumination.

An objective of the invention is to provide a handgrip that can be strategically positioned to provide safe entry or exiting of a boat.

Still another objective of the invention is to provide a handgrip that can be secured to a piling without damaging the wood.

Yet another objective of the invention is to provide a handgrip that is easy to install and remove.

Still another objective of the invention is to teach the use of a handgrip for entry and exiting of a boat.

Still another objective of the invention is to teach the use of a portable handgrip that include a means for illumination.

Other objectives and advantages of this invention will become apparent from the following description taken in conjunction with the accompanying drawings wherein are set forth, by way of illustration and example, certain embodiments of this invention. The drawings constitute a part of this specification and include exemplary embodiments of the present invention and illustrate various objects and features thereof.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a pictorial view of a boat tied to a dock with the safety handle of the instant invention attached to a piling;

Figure 2 is a perspective view of the safety handle with adjustable straps;

Figure 3 is a back view of Figure 2 depicting the wood engaging members; and

Figure 4 is a perspective view of the safety handle with quick release snap.

DETAILED DESCRIPTION OF THE INVENTION

Although the invention will be described in terms of specific embodiments, it will be readily apparent to those skilled in this art that various modifications, rearrangements and substitutions can be made without departing from the spirit of the invention. The scope of the invention is defined by the claims appended hereto.

Referring to the Figures, set forth is safety handle 10 for use and attachment to a piling 100. The safety handle consists of a base member 12 constructed of a flexible sheet of material such as plastic, a laminate, or grooved wood. The sheet of material has a front surface 14, a back surface 16, a top edge 18, a bottom edge 20, a first edge 22, and a second edge 24. A hand grip 26 secured to the back surface 16 may be integrally formed with the base member or alternatively fastened to the base member by conventional fasteners. By attaching of the hand grip to the base member by conventional fasteners would allow the use of a teak hand grip to be secured to a plastic base member. Similarly, an articulating wood base member could have a plastic hand grip. In the basic embodiment a pair of straps 28 and 30 is connected to the first side edge 22 and are adapted to extend around a piling wherein each strap is of sufficient length so as to provide engagement with the second edge 24 of the base member. In a basic embodiment slot like holes 32 and 34 allow the distal end 36 of the strap 28 to be

pulled through the slot like apertures 32 and 34. Similarly, the distal end 38 of strap 30 is drawn through slot apertures 40 and 42 thereby securely holding the base member and hand grip against a piling.

As shown in Figure 1 a boat 102 is shown placed along a dock 104 with pilings 100, 106, 108 and 110. When a boat is docked there would be a stern line 112 extending from the piling 106 to the transom 114 of the boat 102 to prevent the boat from moving forward. Similarly, a line 116 would attach from piling 110 to the bow 118 of the boat 102 to prevent the boat from moving backwards. In this example, the safety handle 10 is secured to the piling 100 with straps 28 and 30 which wrap around the piling and once secured thereto hand grip 26 is available for passengers of the boat to enter and exit without physically touching the wood. As previously mentioned new wood pilings would maintain a residual of a chemical used to prevent early wood rotting from weather, parasites and so forth. Older pilings that are weathered are no less dangerous as they would be filled with splitters. Thus, the back surface 16 prevents an individuals hands from contacting the piling and the hand grip 26 provides the passengers and owner of the vessel a safe means of grasping the piling without fear of damage to the persons hands.

Referring now to Figure 3 shown is the front surface 14 of the base member with top edge 18, bottom edge 20, side edge 22, and

second side edge 24. Straps 28 and 30 are shown in an untied position available for insertion through apertures 34, 36 and 40, 42 respectively. The front surface 14 of the base member includes wood engaging tabs 50 which may consist of large protrusions such as spikes for minute insertion into the wood piling, or small protrusions that provide surface friction similar to sandpaper. The preferred embodiment is to provide a texture that will not physical mar the piling yet provides a frictional engagement to inhibit movement of the base member once attached.

Referring now to Figure 4 the safety handle may include a hand grip 60 having photoluminescent paint which is capable of retaining light energy during the day and illuminating the handgrip position in darkness. Alternatively, a chamber 62 may be provided wherein a chemiluminescent chemical light stick 64 may be placed within the hand grip 60. In this embodiment, the hand grip in this embodiment is made out of a clear or translucent plastic wherein the light stick illumination shines through the hand grip. Further, only the inner edge of the handgrip may allow light stick illumination wherein the base member is illuminated as if backlit. The use of chemiluminescent chemical is well known in the art as illustrated by U.S. Patent No. 3,576,987; colored light sticks may also be used to provide an ambience to the handle such as those found in U.S. Patent Nos. 3,816,326; 3,781,329; and 3,704,309.

The straps may include a quick release fastener 66 which

consists of a male insert 68 and female counterpart 70 with release tabs 72 that would allow the installer to quickly attach or release the strap 28 around a piling. The adjustability of the strap remains wherein the proximal end 36 can be drawn through the quick release fastener depending on the piling size. Typical pilings for docks range from 7 inches at a minimum to upwards of 20 inch as a maximum. This strap would preferably be made from nylon or the like resilient material that maintains flexibility despite frequent changing of sizes to accommodate different size pilings. This would allow the boat owner to quickly release or attach the hand grip to any piling whether it would be for a short visit at a restaurant or an extended visit such as a live a board. While the use of a screw or nail fastener would be contemplated by this invention, must marinas are cognizance of the damage that a screw or nail will cause to a piling. For this reason, it is a preferred that attachment to the piling is by the use of straps.

As previously stated, the base member may be plastic or a wood base can be employed. The use of plastic provides longevity and is inexpensive to manufacture. However, the use of a wood, such as a teak, with tongue and groove type slats is well known in the art and would allow for the required ability of the base member to wrap around a piling of different sizes. A wood member would be more expensive to manufacture and maintain but provides an elegant hand grip that would befit expensive motor yachts.

In operation, the front surface of a flexible base member is strategically positioned along a length of a piling, the base member having a handgrip mounted or formed to a back surface of the base member.

A proximal end of an attachment strap is coupled to a first side edge of the base member having a length sufficient to encircle a piling wherein a distal end of the strap is fastened to a second side edge of the base member.

The strap is pulled taut to securely position the base member against said piling and the handgrip is then available for use in entry and exiting of a boat.

It is to be understood that while I have illustrated and described a certain form of my invention, it is not to be limited to the specific forms or arrangement of parts herein described and shown. It will be apparent to those skilled in the art that various changes may be made without departing from the scope of the invention and the invention is not to be considered limited to what is shown in the drawings and described in the specification.